

Identification and Prioritization of Strategic Thinking Parameters in Khouzestan Steel Company Using The Structural Equations

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Abstract

The importance of strategic planning is not only in the accurate prediction of future, but also in the responsiveness to the future and this is possible through the continuous strategic thinking. Understanding this issue, this paper seeks to identify and rank the strategic thinking parameters in Khouzestan Steel Company. The research method is applied in terms of objective and descriptive- analytical according to the data analysis. The statistical population of research consists of all directors in Khouzestan Steel Company and 50 ones are randomly selected as the samples. The structural equation modeling and PLS software are utilized for data analysis. The research results indicate that all three levels of strategic thinking have the meaningful and direct (positive) relationship with strategic thinking, so that the most important role and highest coefficient belong to the personal level with coefficient of 0.557, then the organizational level with coefficient of 0.352, and finally the group level with a coefficient of 0.139.

Keywords: (Strategic thinking, strategic ranking, strategy identification, structural equation modeling, PLS)
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Introduction

If a manager or director is willing to be effective, he should improve the skills of strategic thinking. The strategic thinking is a process during which the manager or director learns how to define the Business Vision by teamwork and critical thinking. The strategic thinking is a tool which helps the managers to deal with changes, to plan for development, and visualize new opportunities. The strategic thinking needs to think strategically [37]. A firm or company can work without a formal strategic thinking, but its survival would not be possible without strategic thinking. Mintzberg argues that the strategic thinking is a process of analysis and division of an objective in the form of predictable stages and implementation and also the process of Synthesis, Intuition and Creativity which put the organization in the first priority over the competitors by creating an integrated framework of visions [38].

The strategic thinking helps them the organizations to effectively develop their strategic planning. The nature of strategic thinking, strategic planning and implementation processes helps the organization to create the sustainable competitive advantages. The strategic thinking is the fundamental prerequisite of strategic planning and management

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and its existence facilitates targeting goals and identification of strengths, weaknesses, opportunities and threats, and the consequent strategies [11]. The strategic thinking is also effective in strategic action and affects the management effectiveness and efficiency in resource allocation, restructuring, culture change, change resistance management and conflict management. This paper seeks to provide a method for identifying and ranking the strategic thinking by understanding the importance of this issue.

1 Research literature

Strategic thinking is considered as the one of two main capabilities of leaders with outstanding performance [8]. According to Mintzberg's view, strengthening the strategic thinking leads to the better developed strategies. He argues that the managers, who are equipped with strategic thinking ability, are able to encourage other employees to find the creative approaches for success of organization [26]. Such these managers see the organization as it should be, not as it is [29]. Therefore, the strategic thinking can be considered as the precursor to future design of organization [30]. This needs the managers' thought to go beyond the routine operation with the aim to focus on the long-term strategic intention for business [24]. Strategic thinking consists of the activities such as data collection, analysis and discussion and exchange view about the conditions governing the organization [10] and also the companies with various activities, responsiveness to main questions about the organizational portfolio [28]. Abraham considers the strategic thinking as the identification of reliable strategies or business models which create value for customer. He argues that searching for appropriate strategic options, which is usually done as a part of strategic management process, is in fact the practical outcome of strategic thinking [1]. Graetz considers the role of strategic thinking as an effort to innovate and visualize the new and completely different future for organization and it may lead to the redefinition of main strategies or even the industry in which the company is active [15]. Thus, it can be concluded that the strategic thinking is a continuous process which has the aim at resolving the ambiguity and giving meaning to a complex environment [5]. This process covers the situation analysis as well as the creative combination of analysis results in the form of a successful strategic program [40]. Strategic thinking enables the manager to understand which factors are effective in achieving the target objectives and which one is not effective and why? and how the effective factors create the value for customer? This insight into the effective factors in creating the value makes the identification power. Without this identification, spending the (material and immaterial) sources by organization to gain the success will be useless. According to Mintzberg's viewpoint, strengthening the strategic thinking leads to the development of better strategies. He argues that the managers, who have the strategic thinking, are able to encourage other staff to find the creative strategies for organizational success. They see the organization as it should be, not as it is. Therefore, the strategic thinking can be considered as the precursor to future design of organization.

Most of the thinkers, who study on the strategic thinking, raise this type of thinking as the distinct thinking style compared to other type of thinking such as the systematic, intuitive, and analytical thinking. For instance, Kenichi Ohmae, who is the superior consultant in Mc Kinsey Company, has considered the strategic thinking versus the systematic and intuitive thinking and compared them. He said: Facing with problems, events or situations, which apparently compose a coordinated "Totality", a strategic thinker divides them into their constituent components. After identifying the components and their importance, he recomposes them according to the thinking power in a way that they have the highest advantage for him.

According to Kilroy and McKinley's view, a strategist should be able to simultaneously utilize different types of linear and non-linear thinking styles and also make the divergence obtained by non-linear thinking convergent with the linear thinking. The link thinking, in which a thinker integrates the linear and non-linear thinking styles, is stronger than a linear approach for thinking which is current in most of the organizations. The ways, which most of the managers apply in thinking now, are mainly based on a linear thinking system and result from the logical reasoning. This type of thinking consists of data collection, analyzing them, judgment, reasoning and review and survey. In recent years, the access to personal computers and also the increased processing power have led to more application of linear thinking style in business world [19].

Strategic thinking: Concept and importance

Strategic thinking is a cognitive and behavioral process by which individuals and organizations envision the future, anticipate change, and align current decisions with long-term objectives. It is not merely a planning tool but a mindset that emphasizes systems thinking, creativity, foresight, and the ability to interpret complex environments [25, 4]. As organizations navigate through dynamic, volatile, and competitive landscapes, the ability to think strategically becomes a fundamental component of strategic management.

Several scholars have defined strategic thinking in different ways. Liedtka [22] emphasized five major elements: a systems perspective, intent-focused thinking, thinking in time, hypothesis-driven exploration, and intelligent opportunism. Meanwhile, Goldman et al. [14] argue that strategic thinking is a learnable skill that can be embedded into the organizational culture through intentional leadership practices and structural mechanisms.

In industrial sectors like steel manufacturing—particularly in developing countries—strategic thinking provides a roadmap to adapt to market globalization, resource constraints, environmental regulations, and emerging technologies [3]. It equips decision-makers with the tools to move beyond operational concerns and toward a vision-oriented, proactive stance.

Dimensions and parameters of strategic thinking

A broad review of the literature identifies several core dimensions of strategic thinking, including:

- **Strategic Vision** – The ability to formulate a clear, long-term vision of organizational success [32].
- **Environmental Scanning** – Gathering and interpreting information about the external environment to anticipate change [9].
- **Systems Thinking** – Understanding interconnections within and outside the organization [36].
- **Creativity and Innovation** – Generating novel solutions to strategic problems [31].
- **Hypothesis-driven Thinking** – Testing assumptions and making decisions based on rational models [23].
- **Strategic Intent and Flexibility** – Balancing focused vision with adaptability in decision-making [17].

These parameters vary by industry context, but they consistently contribute to organizational agility, learning, and competitive advantage.

Strategic thinking in the steel industry

In the steel industry, particularly in Iran and the Middle East, organizations like Khouzestan Steel Company face unique challenges such as price volatility in global markets, political and economic sanctions, limited access to advanced technologies, and a shortage of strategic leadership training. These challenges necessitate a well-structured approach to strategic thinking at all managerial levels.

A study by Rostami and Hosseini [35] on Iranian industrial firms revealed that the lack of strategic foresight and weak environmental scanning mechanisms are among the major causes of inefficiency and lost opportunities. Another regional study [12] indicated that firms that invested in strategic thinking capabilities, including leadership development and scenario planning, had higher resilience during COVID-19 disruptions.

Thus, strategic thinking is not just a theoretical concept, but a critical managerial competency that influences performance, innovation, and sustainability in heavy industries.

Structural equation modeling (SEM) in strategic research

To analyze complex relationships among strategic thinking parameters, Structural Equation Modeling (SEM) offers a powerful statistical framework. SEM combines factor analysis and regression modeling to test hypotheses involving latent variables [16]. It allows researchers to assess the direct and indirect effects among constructs such as strategic vision, creativity, and decision-making quality.

In the context of this study, SEM enables the prioritization of strategic thinking parameters in Khouzestan Steel Company by identifying which dimensions have the greatest impact on organizational alignment and future readiness. SEM has been widely used in strategic management research [20], especially for modeling cognitive and behavioral constructs that are not directly observable.

Need for prioritization and implementation

While identifying strategic thinking components is vital, it is equally important to **prioritize** them based on contextual relevance, resource constraints, and organizational maturity. Prioritization enables decision-makers to focus on developing the most impactful competencies first. Tools like the Analytic Hierarchy Process (AHP), Delphi Method, or integration with SEM provide empirical bases for such prioritization [27].

Furthermore, embedding strategic thinking into organizational culture requires long-term leadership commitment, strategic HR interventions, and alignment between corporate strategy and individual behavior [13, 31].

To effectively think about business process, the application of logic reasoning should be postponed until the nature of problem or issue, about which we think, is well understood or the possible solutions are identified. In current era, a large number of managers initially apply their PCs and start creating spreadsheets before thinking sufficiently about the issue which we are seeking to solve, or even before defining the issue properly, while a link thinking process is needed to solve the current problems. Given these cases, it is essential to identify and rank the strategic thinking parameters in Khouzestan Steel Company through the structural equation modeling; the obtained results are presented in this study.

Research background

Liedtka [23] emphasized that strategic thinking combines both analytical reasoning and creativity, arguing that organizations must go beyond linear planning and develop strategic insight through opportunity-oriented decision-making. Pisapia, Reyes-Guerra, and Coukos-Semmel [31] built upon this by identifying key dimensions of strategic thinking, including systems thinking, intent-focused vision, and intelligent opportunism, and suggested that these elements are essential for adaptive leadership in complex environments. Goldman, Scott, and Follman [14] explored how organizational practices can cultivate strategic thinking among managers. Their findings showed that fostering open communication, encouraging reflection, and providing learning-oriented challenges contribute to long-term strategic capability. In Iran, Ahmadi and Ahmadian [2] analyzed the relationship between strategic thinking and innovation performance in Mobarakeh Steel Company. They found that foresight, creativity, and systems perspective significantly affect organizational innovation, highlighting the need for broader strategic culture within steel firms. Rezaei and Kazemi [34] examined the impact of strategic thinking on organizational agility in Esfahan Steel Company using structural equation modeling (SEM). They concluded that dimensions such as long-term orientation and environmental scanning positively influenced the firm's ability to respond to market fluctuations. In a similar context, Hosseini et al. [18] employed the Analytic Hierarchy Process (AHP) to prioritize strategic thinking components in Khouzestan Steel Company. Their analysis revealed that environmental scanning and strategic flexibility were considered the most critical attributes in facilitating strategic planning and competitiveness in the Iranian steel industry. Rashid, Ahmed, and Rahman [33], using SEM, investigated the effect of strategic thinking on organizational innovation in the steel sector of Bangladesh. They found that strategic vision and proactive opportunity recognition were key predictors of innovation capacity, especially in turbulent markets. Lee, Kim, and Park [21] conducted a case study on POSCO, a leading South Korean steel manufacturer, showing that strategic thinking training contributed to sustainability-driven innovation by enhancing managers' ability to integrate environmental and technological trends into strategic plans. Most recently, Hair et al. [16] highlighted the importance of partial least squares SEM (PLS-SEM) for evaluating complex models involving latent variables such as strategic mindset. They argued that SEM is particularly useful in organizational behavior and management research, where relationships between psychological constructs and operational performance must be validated.

2 Materials and methods

This research is applied based on the objective, and survey in terms of data collection, and has the descriptive-analytical type according to the data analysis. The library and field methods are utilized in order to collect data, so that the library method is applied in the research background and literature section and the survey method in data collection section. Thus, the questionnaire is the data collection tool of research. Furthermore, the experts' viewpoints are utilized in order to identify the strategic thinking parameters. The statistical population of research consists of all managers in Khouzestan Steel Company and 50 ones are randomized studied as samples through Morgan table. The strategic thinking has three personal, group and organizational levels in the questionnaire; they are shown in the following model.

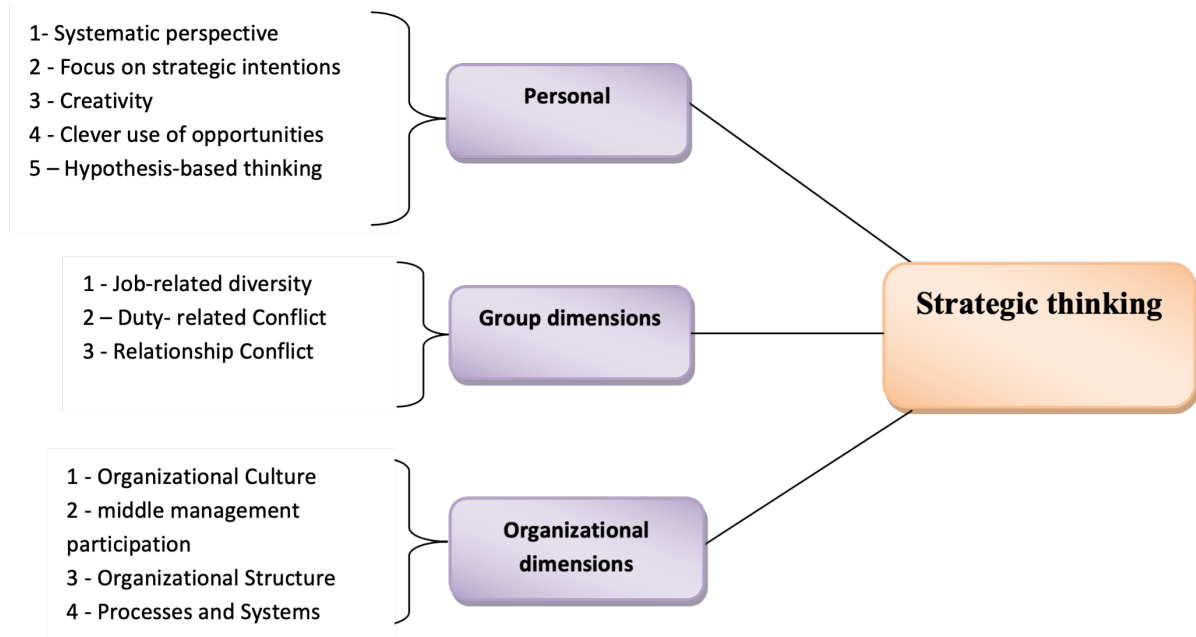


Figure 1: Research model

Structural equation modeling is used for data analysis. The partial least squares regression method, which is introduced in regression modeling with PLSR, is one of the multi-variable statistical methods by which one or more response variables can be simultaneously modeled towards several variables despite some limitations such as indistinct distribution of response variable, existence of low number of observations, or existence of serious autocorrelation among the explanatory variables [6]. The PLS estimation method determines the coefficients in a way that the resulted model has the maximum power of interpretation and explanation, so that the model can predict the final dependent variable with the highest accuracy. Moreover, the PLS method estimates all model relationships- the interaction between each of the latent variables as well as the weight of measurable indicators associated with each of the latent variables (coefficients out of the measurement model), thus the factor analysis of variables is performed [39].

3 Research findings

The descriptive information about the respondents is initially investigated in terms of samples' work experience, educational level, and age and then the explanatory diagrams and tables are presented.

Respondents' status in terms of age group:

Table 1: Frequency and Frequency Percentage of samples based on the age

Age group	Frequency	Percentage
20-30	8	16.00
30-40	23	46.00
40-50	11	22.00
50-60	5	10.00
60 and above	3	6.00
Total	50	100.00

Respondents' status in terms of educational level:

Table 2: Frequency and Frequency Percentage of samples based on the educational level

Educational level	Frequency	Percentage
PhD	2	4.00
Master	12	24.00
Bachelor	30	60.00
Associate degree	4	8.00
High school diploma	2	4.00
Total	50	100.00

Respondents' status in terms of work experience: Results of factor analysis by PLS method

Table 3: Frequency and Frequency Percentage of samples based on the work experience

Work experience	Frequency	Percentage
0-5	10	20.00
5-10	14	28.00
10-15	13	26.00
15-20	9	18.00
20 and above	4	8.00
Total	50	100.00

Factor analysis for main variables and factors:

The graphical diagram of VPLS Software output, containing the coefficients of variables and their significance (t statistic) are presented as follows:

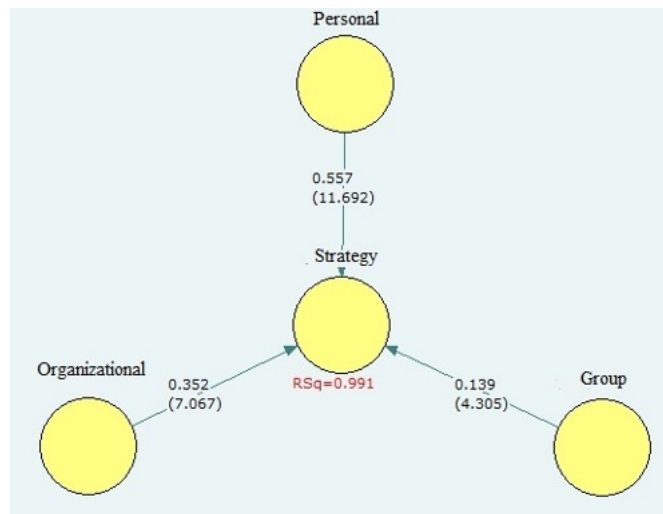


Figure 2: VPLS Software Output for coefficients of variables and their significance

The accuracy of measurement and structural model is investigated before interpreting the coefficients and significance of variables:

Investigating the accuracy of structural model

According to Chin theory [7] R^2 (R^2) with values greater than 0.67 is considered noticeable, from 0.67 to 0.33 moderate and less than 0.19 weak. Furthermore, in a specific model, which is the combination of endogenous latent variables with only one or two exogenous latent variables (dependent variable) (like this study), the moderate value of R^2 is acceptable [7]. In the model above, the value of R^2 is equivalent to 0.99, thus the value of R^2 is acceptable in this model. However, the significance of all factors and questions of questionnaire are described below in a way that if there is outlier question with high tolerances of statistical sample's responses, it is expected that the significance levels of all factors and also R^2 statistics are improved by eliminating this question.

Investigating the accuracy of measured model:

One-dimensional parameters:

Cronbach's alpha coefficient was used in this study in order to measure the one-dimensional parameters. Cronbach's coefficient is a criterion for measuring the internal consistency. If this coefficient is greater than 0.7, it indicates the high reliability of model and if lower than the 0.6, indicates the low reliability of model [7]. In this study and according to the following table, Cronbach's alpha coefficient for each variable is higher than 0.75, thus the reliability of model is fully confirmed.

Table 4: Mean Cronbach's α of model

Reliability and AVE	
Construct	Cronbach's Alpha
Personal	0.920518
Group	0.845211
Organizational	0.845384

In this project, both explanatory power criteria of parameters are estimated by their latent variables:

- A: Composite Reliability Index: This criterion measures the reliability of model and is also called as the Composite Reliability criterion. In the case that this criterion is less than 0.6, it indicates the lack of reliability in model. In estimated model of this project, the mean of this criterion is higher than 0.6 indicating the proper reliability of model.

Table 5: Mean Composite Reliability of model

Reliability and AVE	
Construct	Composite Reliability
personal	0.931460
Group	0.792135
Organizational	0.880482

- B: AVE Index: In order to measure the convergent validity, Fornell and Larcker proposed using the AVE index. If the AVE index is at least equal to 0.5, the indexes have appropriate convergent validity. In other words, an independent variable is able to explain more than half of variance for indexes. Given that the mean AVE of model in this project is higher than 0.5, the convergent validity of model is confirmed.

Table 6: The mean convergent validity of model

Reliability and AVE	
Construct	AVE
Personal	0.502324
Group	0.572269
Organizational	0.563535

Evaluating the distinctiveness of a factor from other factors and eliminating the outlier factors:

In order to measure the divergent validity of model, there are two criteria, Fornell-Larcker and Cross Loading, and the Cross Loading criterion is applied in this project. On the basis of this criterion, it is expected that the correlation coefficient of an index with its independent variable is greater than the correlation coefficient of that index with other independent variables. In fact, evaluating the distinctiveness of a factor from other factors is done to evaluate the proportion or non-proportion of each question in the questionnaire to the statistical indicators and compare the distribution of responses. According to the interpretation of a distinct variable from other variables or measuring the divergent validity of model by Cross Loading method, the bold number of target index in each row is greater than other corresponding numbers in the same row. If there is a number larger than the bold number in a row, this indicates that that question is not a proper question in the questionnaire and the model should be re-estimated by eliminating the inappropriate questions to minimize the error.

Table 7: Factor structure matrix to identify the outlier questions

Factor Structure Matrix of Loadings and Cross-Loadings				
Scale Items	Strategy	Personal	Group	Organizational
q1	0.4736	0.5246	0.3720	0.4363
q2	0.3986	0.4187	0.2894	0.3138
q3	0.6494	0.6535	0.4496	0.5600
q4	0.4206	0.4486	0.2618	0.3547
q5	0.6717	0.7345	0.5626	0.5758
q6	0.7091	0.7349	0.6425	0.6258
q7	0.6513	0.7078	0.4962	0.5252
q8	0.6859	0.8207	0.8201	0.5257
q9	0.7144	0.7753	0.5661	0.5857
q10	0.6042	0.6965	0.4639	0.4684
q11	0.5620	0.5990	0.4703	0.5366
q12	0.5197	0.5636	0.3725	0.5247
q13	0.4584	0.4963	0.3379	0.3875
q14	0.6341	0.7003	0.6035	0.4946
q15	0.6126	0.6463	0.4969	0.5646
q16	0.6294	0.6988	0.5984	0.4871
q17	0.7069	0.7440	0.5576	0.6616
q18	0.6499	0.6903	0.5706	0.5788
q19	0.6992	0.7100	0.6362	0.6774
q20	0.7178	0.7868	0.5394	0.7582
q21	0.5918	0.6099	0.4569	0.6309
q23	0.4867	0.3746	0.5319	0.5270
q24	0.3879	0.3074	0.4392	0.3319
q25	0.6820	0.6885	0.9029	0.5485
q26	0.6024	0.5752	0.7041	0.5944
q27	0.6820	0.6885	0.9029	0.5485
q28	0.4820	0.4658	0.4104	0.5474
q29	0.3428	0.2724	0.3471	0.3787
q30	0.4867	0.3746	0.4219	0.5270
q31	0.3150	0.2456	0.2633	0.3422
q32	0.5859	0.5007	0.4537	0.7793
q33	0.6858	0.7260	0.5459	0.7374
q34	0.6678	0.6987	0.5701	0.7078
q35	0.6879	0.7018	0.6330	0.7627
q36	0.7178	0.6868	0.5394	0.7582
q37	0.5823	0.5020	0.4541	0.6190
q38	0.5859	0.5007	0.4537	0.7793
q39	0.5081	0.3927	0.4337	0.5518
q40	0.3879	0.3074	0.2392	0.4319

It is observed that all three levels have significant relationship with dependent variable and there is no. need to remove the outlier points and the introduced model is appropriate. In fact, the factors and sub-indexes, which are presented in the questionnaire to explain the relationship among three mentioned levels with dependent variable, have well covered the dependent variable and none are identified inappropriate.

Interpreting the coefficients of independent variables:

In the following table, the impact factors of each independent variable on dependent variable, standard deviation and t statistic are presented in order to investigate the significance of variables:

Table 8: PLS model structure and the coefficients of independent variables

Structural Model-BootStrap				
	Entire Sample estimate	Mean of Sub-samples	Standard error	T-Statistic
Organizational- Strategy	0.3520	0.3556	0.0498	7.0675
group-Strategy	0.1390	0.1330	0.0323	4.3054
personal-Strategy	0.5570	0.5547	0.0476	11.6922

The coefficients of variables are presented in the structural model. According to the results of extraction from PLS method, all three thinking strategic levels have direct significant (positive) relationship with strategic thinking, so that the most important role and highest coefficient belongs to personal level with coefficient of 0.557, then the organizational level with coefficient of 0.352 and finally the group level with coefficient of 0.139.

Descriptive statistics of questions related to the variables of model:

The following table also presents the descriptive statistics of each independent variable and even each factor or question of questionnaire including the mean, standard deviation, residual, and their weights:

Table 9: Descriptive statistics related to each factor and their indexes

Factor Loading, Residual and Weights						
Construct	Indicator	Mean	Std	Loading	Residual	Weight
Personal	q1	5.580000	0.784805	0.524600	0.724800	0.057900
	q2	3.960000	1.049003	0.418700	0.824700	0.048800
	q3	3.640000	1.224911	0.653500	0.573000	0.079400
	q4	4.140000	1.143036	0.348600	0.878500	0.051400
	q5	4.140000	0.989949	0.734500	0.460600	0.082200
	q6	3.420000	1.108225	0.734900	0.459900	0.086700
	q7	3.120000	1.189066	0.707800	0.499100	0.079700
	q8	3.380000	1.210330	0.720700	0.480600	0.083900
	q9	3.200000	1.340119	0.775300	0.398900	0.087400
	q10	3.560000	1.109514	0.596500	0.644200	0.073900
	q11	4.000000	0.903508	0.599000	0.641200	0.068700
	q12	3.440000	1.090965	0.463600	0.785100	0.063600
	q13	4.140000	1.125040	0.396300	0.842900	0.056100
	q14	3.280000	1.107304	0.700300	0.509600	0.077600
	q15	4.060000	0.912722	0.646300	0.582300	0.074900
	q16	3.260000	1.065412	0.698800	0.511700	0.077000
	q17	3.420000	1.070762	0.744000	0.446500	0.086500
	q18	2.920000	0.853325	0.690200	0.523600	0.079500
	q19	3.200000	1.124858	0.710000	0.495900	0.085500
	q20	3.000000	1.124858	0.686800	0.528200	0.087800
	q21	3.520000	1.110984	0.509900	0.740000	0.072400
	q23	3.460000	1.034309	0.422000	0.821900	0.249100
Group	q24	4.120000	1.062150	0.239200	0.942800	0.198500
	q25	3.240000	1.098422	0.902800	0.184900	0.349100
	q26	4.020000	0.914509	0.704200	0.504100	0.308300
	q27	3.240000	1.098422	0.902800	0.184900	0.349100
	q22	4.000000	0.903508	0.779300	0.392600	0.125700
Organizational	q28	5.680000	0.913392	0.447400	0.799800	0.103400
	q29	3.860000	1.069236	0.378600	0.856600	0.073600
	q30	3.460000	1.034309	0.527000	0.722300	0.104400
	q31	4.060000	1.114103	0.242200	0.941300	0.067600
	q32	4.000000	0.903508	0.779300	0.392600	0.125700
	q33	3.440000	1.072095	0.637400	0.593800	0.147100
	q34	2.880000	0.895339	0.607800	0.630600	0.143300
	q35	3.220000	1.111902	0.662700	0.560800	0.147600

q36	3.000000	1.124858	0.758200	0.425200	0.154000
q37	3.540000	1.091900	0.619000	0.616900	0.124900
q38	4.000000	0.903508	0.779300	0.392600	0.125700
q39	3.440000	1.033322	0.551800	0.695500	0.109000
q40	4.120000	1.062150	0.332000	0.889800	0.083200

Investigating the paired correlation among the research variables:

PLS model also makes it possible to determine the coefficients of independent variables towards the dependent variable as well as estimating the correlation coefficient among each of the independent variables:

Table 10: Correlation coefficients of main factors

Correlation of Latent Variables			
	Strategy	Personal	Group
Personal	0.973		
Group	0.860	0.812	
Organizational	0.937	0.860	0.763

This part of PLS model analysis lead to the most useful results for managers and employees in the organization and can take into account the correlation between both variables as they are willing to. The rate of strategic thinking correlation is 0.973 at personal level, and then 0.937 at the organizational level, and finally 0.860 at group level.

Impact factor of each question:

The factor analysis with PLS is able to estimate the impact factor of each question or index or factor of questionnaire towards the dependent variable in addition to determining and estimating the impact factor of each independent variable on the dependent variable and also determining the correlation coefficients among the independent variables. The following table represents the questions with highest coefficients.

Table 11: Estimating the impact factor of each question

Personal level	Impact Factor
Personnel's attention to the relationship among the units and organizational functions	0.7345
Personnel's attention to the relationship among the corporate strategy, business and functional unit and with external environment and daily decisions.	0.7349
Personnel's visualization of desired organizational future	0.7078
Paying attention to the valuable organizational objectives	0.7207
Identifying and explaining the future status of main processes in the organization	0.7753
Giving the priority to achievement of long-term results rather than short-term benefits from the employee's perspective	0.7003
The level of designing the strategic options by experts in dealing with new environmental conditions	0.7100
Group level	
Common view of groups in the organization on the task assigned to each group	0.9028
Resolving the personal disputes among the members in the organization	0.7042
Organizational level	
Planning for organizational structure to change and improve the organization	0.7793
Decision making through flexible and effective processes in the organization	0.7582
Existence of service compensation and reward systems including the long-term qualitative criteria in the organization	0.7793

Given the estimated factor impact for each question, it was found that explaining and determining the future status of main processes in the organization with the coefficient of 0.7753 is put in the first priority of strategic thinking at the personal level in Khouzestan Steel Company. The next priorities are as follows, respectively: Personnel's attention to the relationship among the corporate strategy, business and functional unit and with external environment and daily decisions with impact factor of 0.7349, personnel's attention to the relationship among the units and organizational

functions with impact factor of 0.7345, Paying attention to the valuable organizational objectives with impact factor of 0.7207, the level of designing the strategic options by experts in dealing with new environmental conditions with impact factor of 0.7100, personnel's visualization of desired organizational future with impact factor of 0.7078, and finally giving the priority to achievement of long-term results rather than short-term benefits from the employee's perspective with impact factor of 0.7003. At group level, the following cases involve in evaluating the strategic thinking in Khuzestan Steel Company: Common view of groups in the organization on the task assigned to each group with impact factor of 0.9028, and then resolving the personal disputes among the members in the organization with impact factor of 0.7042. And ultimately the effective factors at the organizational level are: Planning for organizational structure to change and improve the organization with impact factor of 0.7793, the existence of service compensation and reward systems including the long-term qualitative criteria in the organization with impact factor of 0.7793, and finally decision making through flexible and effective processes in the organization with impact factor of 0.7582.

4 Conclusion and suggestions

This paper identifies and prioritizes the strategic thinking parameters in Khuzestan Steel Company through utilizing the structural equation modeling. The obtained results indicate that all three levels of strategic thinking have significant and direct (positive) relationship with strategic thinking, so that the most important role and highest coefficient belongs to personal level with coefficient of 0.557, then the organizational level with coefficient of 0.352 and finally the group level with coefficient of 0.139. Investigation of correlation among the research variables indicates that the rate of strategic thinking correlation is 0.973 at the personal level, and then 0.937 at the organizational level, and finally 0.860 at the group level. The model of strategic thinking parameters is designed in this study through identification of strategic thinking parameters and relationship among them as well as utilizing the factor analysis methodology.

The organizational culture is known as the underlying factor affecting the strategic thinking capacity of organization. The systematic vision and creating the space for new ideas and creativity are considered as the requisites for development of skills associated with strategic thinking at the personal level. The duty-related conflict is identified as the factor attracting the managers' higher participation in strategic management process. Furthermore, the medium-level managers' higher participation in strategic management planning process lead to the enhanced creativity and greater richness of target strategic options for organizations on the one hand, and on the other hand increases the capacity to understand and analyze collected environmental data due to the possibility of utilizing a richer set of personal information processing models. The presented model in this study can be helpful in the following areas according to considering the status of Iranian organizations' especially Khuzestan Steel Company:

- As the basis for designing the strategic thinking measurement tools as a first step in improving and developing the strategic thinking
- Determining the causal relationship between the elements, and thus helping to enhance the effectiveness of management decisions and organizational measures in line with improving the strategic thinking.

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